MERCURY OFFSET PROGRAM FOR THE SACRAMENTO RIVER WATERSHED
WORKING GROUP MEETING SUMMARY
December 10, 2002
Tsakopoulos Library Galleria East Meeting Room

Major Outcomes

- Received reaction and comment by work group participants on three hypothetical offset projects
- Started to establish areas of common ground regarding the characteristics of acceptable offset projects

Welcome, Introductions and Status of Process (Eugenia Laychak)

Eugenia Laychak, California Center for Public Dispute Resolution (CCPDR), convened the meeting at 9:10 a.m. She reviewed the overall purpose of the working group meetings sponsored by Sacramento Regional County Sanitation District (SRCSD): to assist in the development of criteria for a successful Mercury Offset program. Ms. Laychak also reviewed the areas covered in the first meeting, which included a brainstorming of issues and concerns regarding a possible offset program. She then reviewed the proposed agenda and stated the desired outcomes of the second meeting.

Participants introduced themselves. Ms. Laychak reviewed the ground rules established at the first Work Group meeting. No comments or additions to the agenda were offered by the participants.

Overview of Offset Program (Vicki Fry)

Vicki Fry, SRCSD Program Mgr. for the Mercury Offset Program, previewed the format for the meeting – a group discussion about three hypothetical offset projects. Ms. Fry stated that the District and its consultant team had developed the offset project examples to foster discussion over a broad spectrum of project types. She clarified that the District was not endorsing any of the hypothetical examples. The working group created these specific hypothetical projects solely to stimulate discussion. Ms. Fry pointed ahead to the third meeting, where it is hoped agreement can be reached on specific criteria and/or constraints that will assist in the feasibility evaluation.

Offset Program Hypothetical Example #1 (Stephen McCord)

Stephen McCord (Larry Walker Associates) provided handouts and presented each of the hypothetical examples. As an overview, he reviewed the linkage analysis presented in the first meeting, which indicated the factors to be considered between mercury inputs to the surface water system (at one end of the linkage) and risk to consumers (at the other end). He asked the group to focus on the concepts, not the specifics in the examples themselves.

Stephen presented hypothetical example #1: a mercury mass removal program, through which a given mass of mercury would be removed from the aquatic system in the Sacramento River

watershed. Credit for this offset example would be obtained based on the measured mass of mercury removed.

Summary of Major Work Group Comments regarding Hypothetical #1

- The implicit hypothesis in this example is that reducing mercury mass loads or mass inputs in a watershed will reduce mercury levels in fish tissue. Although the opposite effect (mercury reductions leading to increased levels in fish tissue) is less likely, this direct link has not been quantified in the Sacramento River watershed and may not accurately represent the driving processes. The resulting high degree of uncertainty regarding the impact of mercury mass reduction may be problematic for offset project development and/or approval.

- Agreement on a trading ratio will be an important topic for this type of project. Numerous factors may influence or be considered in the quantification of the trading ratio.

- Liability issues for this type of project may include the storage and transport of mercury, a hazardous material. One approach offered for addressing that issue is to hire a HazMat subcontractor, however subcontracting will not eliminate District liability. Other approaches may be available to reduce liability.

Offset Program Hypothetical Example #2 (Stephen McCord)
This hypothetical focused on Cache Creek Settling Basin improvements. In this example, a project would be implemented (likely in cooperation with the Army Corps of Engineers and others) that would increase the capture of mercury-enriched sediments from the Cache Creek watershed. Offset credit would be obtained through (a) completion of project elements which would be expected to produce a given reduction in downstream mercury transport and/or (b) participation in an operational activity to remove mercury-bearing sediments from the settling basin.

Summary of Major Work Group Comments on Hypothetical #2

- The results or success of such a project to capture mercury in the Basin may not be known for years. Designing the credit would be a challenge to satisfy concerned agencies and other parties while providing the District with short-term credits to create an incentive to pursue such a project.

- Fluctuations in annual rainfall would affect the amount of mercury captured in such a project. A mechanism for estimating the amount that would be captured would be needed.

- Decisions would need to be made on whether credits would be based on design expectations for the project or actual removal of mercury at some point in the watershed. Environmental and community interests may object to a program that awards offset credit based on an

attempt to reduce or offset impacts, regardless of the outcome. On the other hand, the project sponsor would not likely make commitments regarding unpredictable outcomes.

Offset Program Hypothetical Example #3 (Stephen McCord)
Hypothetical example #3 is a project to reduce mercury methylation in Lake Natoma, located in Sacramento County below Folsom Dam in the American River watershed. This project would seek to reduce mercury methylation through oxygenation of the bottom layers of the lake. Such a project would contribute to our knowledge base regarding our ability to affect methylation and bioaccumulation through in-system processes. Credit for such a project would be given for completing the project and accompanying research (monitoring) elements.

Summary of Major Work Group Comments on Hypothetical #3

- Hypothetical example #3 is a project that would engender some of the same concerns/issues as Hypothetical #2, i.e. requires a long time frame for project completion with uncertain effectiveness and/or ability to measure resulting changes.

- Hypothetical #3 is a research study and by itself would not qualify as an approvable offset project. However, since the acquisition of results from the study would be useful, participants generally liked combining the study with a load reduction project.

- Including measurable success criteria would be important for generating support for a project similar in design to the hypothetical example. However, the ability to measure improvements in fish tissue contamination is unknown, especially downstream of the lake.

The morning session broke for lunch at 12:03 pm.

Work Group Comments, Questions and Answers (Afternoon Session)
Eugenia Laychak reconvened the group at 1:05 pm for a general review and expansion of the morning discussion. Ms. Laychak asked the group to surface areas of common ground and other issues – what key questions still needed to be asked.

Areas of Common Ground

- Generally the group agreed that an approvable offset project should include definable elements, should be placed in context (potential benefit the project would provide within the watershed, as a whole), should be technically and legally defensible and should articulate measures for success. In general, there was support for an offset project type that included mercury mass reduction, either through reductions in inputs or reductions of in-stream mercury.

- In general, there was not support for projects which would take years to develop, regardless of the potential benefits to fish tissue reductions.

- Projects affecting mercury conditions in the immediate vicinity of Freeport and downstream Delta waters are most favorable.

- Research, outreach, and similar activities are desirable, but not sufficient as stand-alone offset projects. Such activities may influence the magnitude of trading ratios.

- In general, where uncertainty regarding the scientific basis for a project is higher, a higher trading ratio would be expected.

- Generally, the Group supported the District's efforts to partner with interests represented in the room to develop an offsets project.

Other Major Comments and Issues

- Trading ratios should factor in location and temporal aspects.

- Must demonstrate that localized "hot spots" would not result at the current point of discharge.

- Opinions varied regarding the proper course of action if project success was not achieved. Some thought that an incentive for attempting a project is needed, even if the project goal is not met. Others indicated that a project that met defensible criteria would not lose credit. Still others linked credit receipt to measurable success. It was postulated that the environmental community would not react favorably to the receipt of an offset credit for attempting a project, regardless of its outcome.

- The group did not attempt to reach agreement on acceptable measures of success, i.e. whether a project is deemed successful after removing mercury from the river or after reducing levels of mercury in fish tissue.

- It was offered that a guiding principle in the consideration of offset projects should be providing the best benefit to the public. Public interest and public benefit must be kept in the forefront.

Next Meeting

Vicki Fry thanked everyone for attending. Eugenia Laychak said the next meeting was planned for late February and that the meeting notice would be sent out to all working group participants. She adjourned the meeting at 1:59 pm.